

COMMERCIAL ITEM DESCRIPTION  
SPECIFICATION SHEET

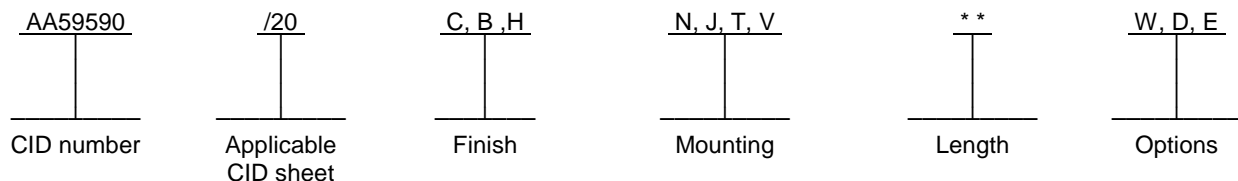
HOLDERS, ELECTRICAL CARD, WEDGE RETAINERS, 3 PIECE, SCREW ACTUATED DRIVE,  
.260 X .260 INCH BODY SIZE, WITH VISUAL LOCK INDICATION AND SCREW RETENTION

The General Services Administration has authorized the use of this  
commercial item description (CID) for all federal agencies.

The complete requirements for procuring electrical card holders described herein shall consist of this document and  
the latest issue in effect of A-A-59590.

**SCOPE.** This CID specification sheet covers three piece card holders with a visual locking indicator feature that use  
screw actuated wedges to hold circuit card assemblies into their installed positions in heat sinking devices (cold  
plates, heat exchanger) or other applications. Card holders covered by this CID are intended to provide 60g/6ms  
resistance to shock, withstand 25 G-rms of vibration and provide 2 to 4 degrees C/W/inch thermal resistance  
between the circuit card assemblies and the heat sink surfaces. The screw retention feature is intended to prevent  
unintentional disassembly of the card holder. Items covered by this CID specification sheet are intended for  
commercial/industrial applications.

**CLASSIFICATION.** This CID specification sheet uses a classification system which is included in the Part  
Identification Number (PIN) as shown in the following example (see notes).



**SALIENT CHARACTERISTICS.**

Performance. Card holders shall hold the circuit card firmly in place providing high resistance to shock and vibration  
while providing maximum thermal transfer when properly installed. The recommended installation torque for the card  
holder is 10 inch-pounds (1.1 N-m) for the standard screw and 12 inch-pounds (1.4 N-m) for screws with self-locking  
element (see figure 5).

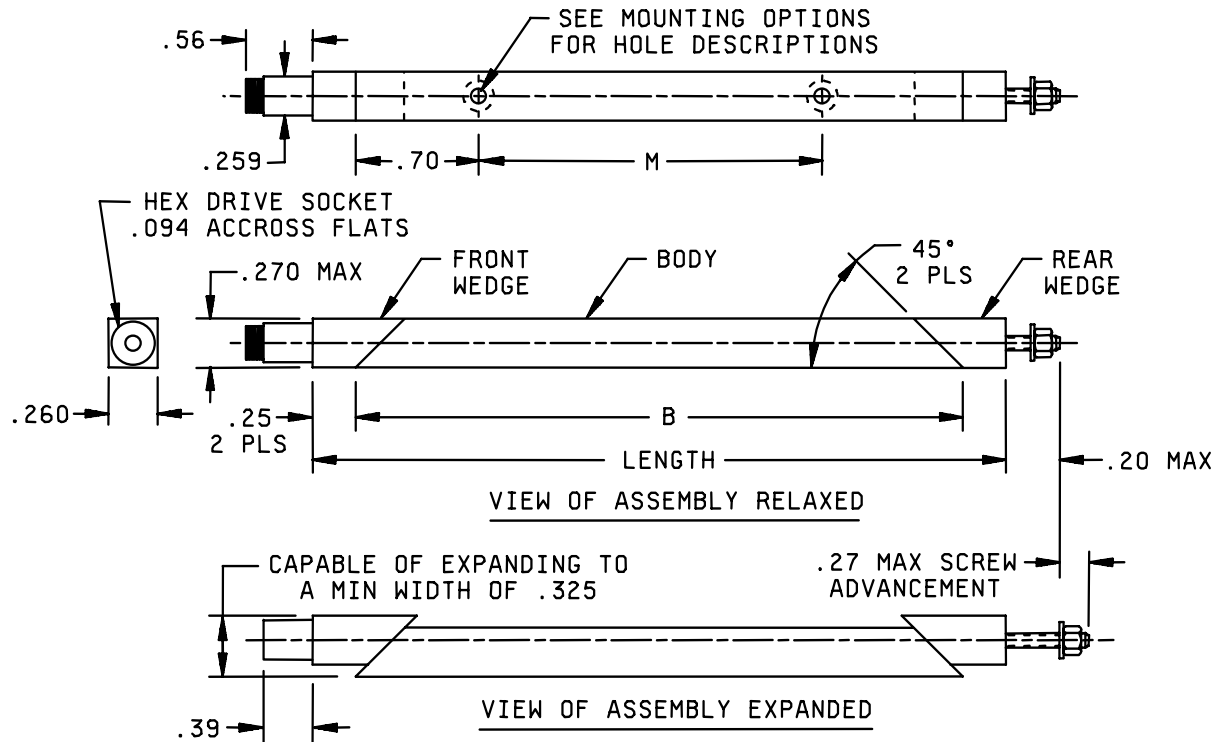
Interface and physical dimensions. The card holders supplied to this CID specification sheet shall be as specified  
herein and the general CID.

Screw retention (locknut). The screw retention feature intended to prevent unintentional disassembly of the card  
holder shall be as specified in figure 2. The locknut shall be fabricated of a corrosion resistant material.

Finish options. The finish options, C, B or H, shall be as specified in A-A-59590.

Mounting options. The mounting options N, J, T or V shall be as specified in A-A-59590. When specified, two  
mounting holes are required on card holders less than 6.00 inches (152.4 mm) in length. See table I and figure 1 for  
mounting hole spacing requirements.

Length, expanded and relaxed dimensions. The length, expanded and relaxed dimensions shall be as specified in  
figure 1. The length designator shall be as specified in A-A-59590 and the available lengths are listed in table I.



Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.094	2.38	.25	6.4	.260	6.60	.325	8.26	.56	14.2
.20	5.1	.259	6.58	.270	6.86	.39	9.9	.70	18.4

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are  $\pm .02$  (0.5 mm), for 2 places and  $\pm .010$  (0.25 mm), for 3 places.

FIGURE 1. Relaxed and expanded dimensions.TABLE I. Assembly dimensions.

PIN length designator	Dimension "LENGTH" $\pm .02$ ( $\pm 0.5$ )	Dimension "B" $\pm .03$ ( $\pm 0.8$ )	Dimension "M" $\pm .005$ ( $\pm 0.13$ )
28	2.8 (71)	2.30 (58.4)	.90 (22.9)
33	3.3 (76)	2.80 (71.1)	1.40 (35.6)
38	3.8 (97)	3.30 (83.8)	1.90 (48.3)
43	4.3 (102)	3.80 (96.5)	2.40 (61.0)
48	4.8 (122)	4.30 (109.2)	2.90 (73.7)
53	5.3 (135)	4.80 (121.9)	3.40 (86.4)
58	5.8 (147)	5.30 (134.6)	3.90 (99.1)

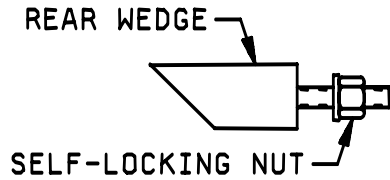


FIGURE 2. Screw retaining self-locking nut (corrosion resistant) details.

Visual lock indicator (see figure 3). When the card holder is in the unlocked (relaxed) state, the end of the actuating screw shall display a red band on the side of the screw. When the actuating screw on the card holder has been tightened (assembly expanded) so that the assembly is in the locked position, this red band shall be concealed.

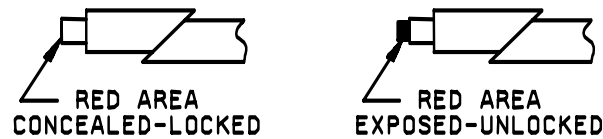


FIGURE 3. Visual lock indicator.

Options. Card holders can have the following options. Card holders not requiring one of the following options shall leave the options position in the PIN blank.

Lockwasher and flat washer (see figure 4). A lockwasher and flat washer located under the screw head will provide for additional resistance to loosening from shock and vibration. Card holders requiring a lockwasher and flat washer option shall include a suffix "W" in the PIN (see classification and notes).

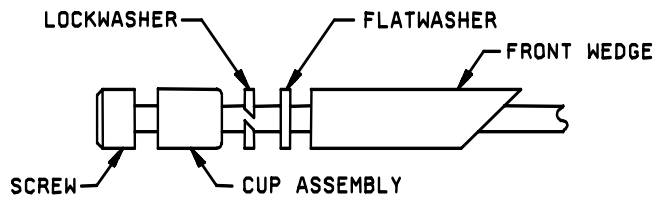


FIGURE 4. Lockwasher and flat washer details.

Screw self-locking element (see figure 5). The use of a screw self-locking element will provide prevailing torque for resistance to loosening from shock vibration. Card holders requiring a screw self-locking element shall include a suffix "E" in the PIN (see classification and notes).



FIGURE 5. Screw self-locking element details.

Lockwasher, flat washer, and screw self-locking element. Card holders requiring a lockwasher, flat washer, and screw self-locking element option shall include a suffix "D" in the PIN (see classification and notes).

## NOTES.

PIN. The PIN should be used for Government purposes to buy commercial products to this CID specification sheet. See the classification section for PIN format example.

Commercial products. As part of the market analysis and research effort, this CID specification sheet was coordinated with the following manufacturers of commercial products. At the time of CID specification sheet preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID specification sheet. (NOTE: This information should not be considered as a list of approved manufacturers or be used to restrict procurement to only the manufacturers shown.)

<u>Manufacturer CAGE</u>	<u>Manufacturer name and address</u>	<u>Manufacturer contact information</u>
52094	Calmark Corporation 4915 Walnut Grove Avenue San Gabriel, CA 91776-2099	Tel: (626) 287-0451 Fax: (626) 287-7350 E-mail: sales@calmark.com URL: www.calmark.com

Part number supersession data. This CID specification sheet part numbers supersedes the following manufacturer's part numbers as shown. This information is being provided to assist in reducing proliferation in the Government inventory system.

TABLE II. Commercial part number supersession data. 1/

PIN designator AA59590/20	Vendor similar designator or type part number 2/ CAGE 52094	PIN designator AA59590/20	Vendor similar designator or type part number 2/ CAGE 52094
CJ28	V245CR2.80HR	CJ28W	WV245CR2.80HR
CN28	V245CR2.80R	CN28W	WV245CR2.80R
CT28	V245CR2.80T0R	CT28W	WV245CR2.80T0R
CV28	V245CR2.80T2R	CV28W	WV245CR2.80T2R
CJ28E	V245CR2.80HLR	CJ28D	WV245CR2.80HLR
CN28E	V245CR2.80LR	CN28D	WV245CR2.80LR
CT28E	V245CR2.80T0LR	CT28D	WV245CR2.80T0LR
CV28E	V245CR2.80T2LR	CV28D	WV245CR2.80T2LR
BJ28	VA245CR2.80HR	BJ28W	WVA245CR2.80HR
BN28	VA245CR2.80R	BN28W	WVA245CR2.80R
BT28	VA245CR2.80T0R	BT28W	WVA245CR2.80T0R
BV28	VA245CR2.80T2R	BV28W	WVA245CR2.80T2R
BJ28E	VA245CR2.80HLR	BJ28D	WVA245CR2.80HLR
BN28E	VA245CR2.80LR	BN28D	WVA245CR2.80LR
BT28E	VA245CR2.80T0LR	BT28D	WVA245CR2.80T0LR
BV28E	VA245CR2.80T2LR	BV28D	WVA245CR2.80T2LR

See footnotes at end of table.

TABLE II. Commercial part number supersession data. 1/ – Continued.

PIN designator AA59590/20	Vendor similar designator or type part number 2/ CAGE 52094	PIN designator AA59590/20	Vendor similar designator or type part number 2/ CAGE 52094
HJ28	VHA245CR2.80HR	HJ28W	WVHA245CR2.80HR
HN28	VHA245CR2.80R	HN28W	WVHA245CR2.80R
HT28	VHA245CR2.80T0R	HT28W	WVHA245CR2.80T0R
HV28	VHA245CR2.80T2R	HV28W	WVHA245CR2.80T2R
HJ28E	VHA245CR2.80HLR	HJ28D	WVHA245CR2.80HLR
HN28E	VHA245CR2.80LR	HN28D	WVHA245CR2.80LR
HT28E	VHA245CR2.80T0LR	HT28D	WVHA245CR2.80T0LR
HV28E	VHA245CR2.80T2LR	HV28D	WVHA245CR2.80T2LR

1/ CID PINs listed only with length designator "28".

2/ The manufacturer's part number shall not be used for procurement to the requirements of this CID specification sheet. At the time of preparation of this CID specification sheet, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown. For actual part marking requirements, see the marking paragraph of the basic CID.

TABLE III. Example of PIN with available length designators.

PIN designator AA59590/20	Vendor similar designator or type part number 1/ CAGE 52094
CJ28	V245CR2.80HR
CJ33	V245CR3.30HR
CJ38	V245CR3.80HR
CJ43	V245CR4.30HR
CJ48	V245CR4.80HR
CJ53	V245CR5.30HR
CJ58	V245CR5.80HR

1/ The manufacturer's part number shall not be used for procurement to the requirements of this CID specification sheet. At the time of preparation of this CID specification sheet, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown. For actual part marking requirements, see the marking paragraph of the basic CID.

## MILITARY INTERESTS:

Custodians:  
Army – CR  
Navy – EC  
Air Force – 11  
DLA – CC

## CIVIL AGENCY COORDINATING ACTIVITY:

GSA – 7FXE  
Preparing Activity:  
DLA – CC  
Project 5998–0120